

# INTERNATIONAL SEARCH REPORT

International Application No  
PCT/EP2004/010169

**A. CLASSIFICATION OF SUBJECT MATTER**  
IPC 7 C01B3/38

According to International Patent Classification (IPC) or to both national classification and IPC

**B. FIELDS SEARCHED**

Minimum documentation searched (classification system followed by classification symbols)  
IPC 7 C01B

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 00/00426 A (SCHADDENHORST DAVID ;SCHOONEBEEK RONALD JAN (NL); SHELL INT RESEAR) 6 January 2000 (2000-01-06) cited in the application page 7, line 19 – line 24; claims	1,4-6
Y	-----	2,3
X	WO 99/19249 A (PIETERSE COEN WILLEM JOHANNES ;JONG KRIJN PIETER DE (NL); SCHOONEB) 22 April 1999 (1999-04-22) page 5, line 5 – line 12; claims	1,4-6
Y	-----	2,3
Y	US 4 394 137 A (BRENT ALBERT ET AL) 19 July 1983 (1983-07-19) column 12, line 20 – column 13, line 4; claims	2,3
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Further documents are listed in the continuation of box C.

Patent family members are listed in annex.

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Date of the actual completion of the International search

21 February 2005

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## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 5 744 067 A (JAHNKE FREDERICK CHARLES) 28 April 1998 (1998-04-28) the whole document -----	1-6
A	US 6 447 745 B1 (BERLOWITZ PAUL JOSEPH ET AL) 10 September 2002 (2002-09-10) column 12, line 18 - line 22; claims -----	1-6
A	US 2003/122266 A1 (BAREIS MARC ET AL) 3 July 2003 (2003-07-03) paragraph '0020!; claims; tables -----	1
A	EP 0 892 760 A (SNAM PROGETTI) 27 January 1999 (1999-01-27) cited in the application -----	

## INTERNATIONAL SEARCH REPORT

International Application No  
PCT/EP2004/010169

Patent document cited in search report		Publication date		Patent family member(s)		Publication date	
WO 0000426	A	06-01-2000	AT AT AU AU AU AU AU BR BR CA CA CN CN CZ DE DE DE DE DE DK WO WO EP EP ES ID ID JP JP NO NO PL PL PT US US ZA ZA	222214 T 232836 T 746783 B2 4776299 A 743727 B2 4777699 A 9911654 A 9911739 A 2335970 A1 2335983 A1 1307538 T 1307539 T 20004900 A3 69902547 D1 69902547 T2 69905467 D1 69905467 T2 1098840 T3 0000425 A1 0000426 A1 1098840 A1 1093439 A1 2182544 T3 28037 A 27777 A 2002519181 T 2002519182 T 20006579 A 20006580 A 345181 A1 345190 A1 1098840 T 2004228792 A1 6702960 B1 200100316 A 200100317 A		15-08-2002 15-03-2003 02-05-2002 17-01-2000 31-01-2002 17-01-2000 20-03-2001 03-04-2001 06-01-2000 06-01-2000 08-08-2001 08-08-2001 15-08-2001 19-09-2002 22-05-2003 27-03-2003 11-09-2003 09-12-2002 06-01-2000 06-01-2000 16-05-2001 25-04-2001 01-03-2003 03-05-2001 26-04-2001 02-07-2002 02-07-2002 21-12-2000 21-12-2000 03-12-2001 03-12-2001 29-11-2002 18-11-2004 09-03-2004 29-08-2001 23-07-2001	
WO 9919249	A	22-04-1999	AT AU AU BR CA CN DE DE WO EP ID JP NO PL TW US ZA	231102 T 737880 B2 1335199 A 9813035 A 2306938 A1 1275961 T 69810805 D1 69810805 T2 9919249 A1 1025039 A1 24366 A 2001519311 T 20001927 A 339812 A1 440541 B 6673270 B1 9809263 A		15-02-2003 06-09-2001 03-05-1999 15-08-2000 22-04-1999 06-12-2000 20-02-2003 11-12-2003 22-04-1999 09-08-2000 13-07-2000 23-10-2001 13-04-2000 02-01-2001 16-06-2001 06-01-2004 16-04-1999	
US 4394137	A	19-07-1983	US AU AU	4371378 A 549751 B2 8469682 A		01-02-1983 13-02-1986 16-12-1982	

**INTERNATIONAL SEARCH REPORT**

International Application No  
PCT/EP2004/010169

Patent document cited in search report	Publication date	Patent family member(s)		Publication date
US 4394137	A	CA	1172044 A1	07-08-1984
		DE	3220546 A1	27-01-1983
		FR	2507615 A1	17-12-1982
		GB	2099843 A ,B	15-12-1982
		IT	1151794 B	24-12-1986
		NL	8202327 A	03-01-1983
		NZ	200759 A	09-11-1984
		US	4490156 A	25-12-1984
		CA	1162046 A1	14-02-1984
		DE	3047734 A1	08-10-1981
		US	4400180 A	23-08-1983
		US	4371379 A	01-02-1983
US 5744067	A	28-04-1998	US	5358696 A
			AU	680070 B2
			AU	1040695 A
			BR	9408247 A
			CA	2177176 A1
			CN	1136800 A
			EP	0731773 A1
			FI	962218 A
			HU	75978 A2
			JP	9502694 T
			NO	962260 A
			NZ	276225 A
			PL	314726 A1
			SK	70496 A3
			WO	9515290 A1
US 6447745	B1	10-09-2002	AU	8299601 A
			CA	2415833 A1
			EP	1322549 A2
			JP	2004506583 T
			WO	0216259 A2
US 2003122266	A1	03-07-2003	DE	10002004 A1
			WO	0154219 A1
			DE	50101908 D1
			EP	1252679 A1
EP 0892760	A	27-01-1999	IT	MI960690 A1
			AU	2384597 A
			DE	69702190 D1
			DE	69702190 T2
			DK	892760 T3
			EP	0892760 A1
			NO	984735 A
			WO	9737929 A1
			RU	2175636 C2